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10/019,726	12/20/2001	Gerard Alaux	SANSYL001	1053

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EXAMINER
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TRAN, SUSAN T

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/019,726	<b>Applicant(s)</b> ALAUX ET AL.	
	<b>Examiner</b> Susan Tran	<b>Art Unit</b> 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 9-14, 16, 19-23 and 26-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-14, 16, 19-23, 26-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \*   c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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### **DETAILED ACTION**

Receipt is acknowledged of applicant's Amendment and Request for Extension of Time filed 07/28/03.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21-23, 58, 63, and 68 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It appears that claims 21 and 58 are redundant because both claims are depending in claim 1, and recite the same subject matter.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 9, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dandiker et al. US 5,425,950.

Dandiker teaches a controlled release composition comprising layer-tablet suitable for pulse release of active ingredient, including hypnotic drugs (column 2, lines

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33 through column 3, lines 1-64). The layer-tablet comprises a rapidly disintegrating outer active layer, and inner layer/layers of active ingredient that will gradually remove after the rapidly disintegrating outer active layer is removed (id). The rapidly disintegrating outer active layer dissolves within 30 minutes, and the gradually inner active layer/layers dissolves from 1-3.5 hours (column 5, lines 14-23; and column 8, lines 13-53). The gradually inner active layer/layers further comprises fillers, excipient, surfactant, lubricants, and the like (column 6, lines 65 through column 7, lines 1-2). Dandiker teaches hypnotic drug among other drugs, it is the position of the examiner that it would have been *prima facie* obvious for one of ordinary skill in this art to, by routine experimentation using hypnotic drug in the pulse release formulation, because Dandiker suggests that hypnotic drug is a suitable active ingredient in his invention (column 3, lines 59-64).

Claims 1-4, 6, 9-14, 16, 19-22, 27, 28, 31-46, and 54-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midha et al. US 6,340,476.

Midha teaches pulsatile delivery system comprising first, second and third dosage units having different drug release profile (see abstract). The dosage units can be in the form of tablet, coated tablet, matrix tablet, matrix particles or beads, coated particles or beads, or un-coat particles or beads to be placed in a capsule (column 4, lines 63 through column 5, lines 1-30). The delayed dosage unit can be coated or incorporated in matrix containing polymers, such as cellulose, or methacrylate polymer/copolymer (column 5, lines 23 through column 6, lines 54). The drug-

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containing dosage unit further comprises filler, binder, disintegrant, lubricant, and surfactant, including cationic surfactant (column 7, lines 35 through column 8, lines 1-15). The active ingredients can be selected from antidepressant drugs, analgesic, and anti-anxiety drugs, such as benzodiazepines, lorazepam, midazolam, temazepam and triazolam (column 9).

Midha does not teach the use of anti-anxiety drugs (hypnotic drug) alone in the delivery system. However, since Midha suggests anti-anxiety drugs can be used in the pulsatile delivery system, it would have been *prima facie* obvious for one of ordinary skill in this art to modify Midha's delivery system using anti-anxiety drugs with the expectation of at least similar result, because the reference teaches the advantageous results in the use of pulsatile delivery system to deliver anti-anxiety drugs, such as benzodiazepines, lorazepam, midazolam, temazepam and triazolam (column 9).

Claims 5, 7, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midha et al.

Midha is relied upon for the reason stated above. Midha does not specifically teach the percent release of active agent. However, absent showing evidence on the contrary, it is the position of the examiner that the percent release of active agent is inherent, since Midha teaches pulsatile delivery system having the same release profile, e.g., first dosage being released immediately upon administration, second dosage being released within 3-5 hours (column 12, lines 1-5). Thus, it would have been obvious for one of ordinary skill in the art to, by routine experimentation optimize the amounts of

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binder, disintegrant, or coating to obtain at least similar results. The expected result would be a pulsatile delivery system containing hypnotic agent useful in pharmaceutical art.

Claims 26, and 73-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midha et al., and Cuca et al. US 5,491,681.

Midha does not teach the pulsatile dosage form can be incorporated into drinkable form.

Cuca teaches active ingredients in matrix form suitable for pulsatile release can be incorporated in a drinkable form (column 7, lines 36-42). The active ingredients can be selected from antitussive, antihistamine, antitumor, hypnotics, and the like (column 3, lines 19-50). Thus, it would have been obvious for one of ordinary skill in the art to modify Midha's pulsatile delivery system with the teachings of Cuca with the expectation of at least similar result, because the references teach the advantageous results in the use of pulsatile dosage form to deliver hypnotic drugs.

Claims 23, and 68-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midha et al., in view of Bastin et al. US 6,309,668.

Midha is relied upon for the reasons stated above. Midha does not teach zolpidem as a hypnotic agent.

Bastin teaches multiplayer tablet formulation comprising hypnotic drugs, including zolpidem (columns 1-3). Thus, it would have been *prima facie* obvious for one

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of ordinary skill in the art to modify Midha's anti-anxiety agent (hypnotic agent) with zolpidem in view of the teachings of Bastin to obtain the claimed invention, because the references teach the advantageous results in the use of hypnotic drug in a controlled release dosage form.

Claims 47-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midha et al., Gallopo et al. US 5,176,901.

Midha is relied upon for the reasons stated above. Midha does not specifically teach cocamidopropylbetaine as a cationic surfactant.

Gallopo teaches useful cationic surfactant including cocamidopropyl (column 4, lines 6-9). Thus, it would have been obvious for one of ordinary skill in the art to modify Midha's cationic surfactant using the cocamidopropyl in view of the teaching of Gallopo with the expectation of at least similar result, because the cocamidopropyl is a well-known and useful cationic surfactant in pharmaceutical art.

### ***Response to Arguments***

Applicant's arguments filed 07/28/03 have been fully considered but they are not persuasive.

Applicant argues that the Dandiker compositions require the use of a pH independent hydrophilic polymer. Nowhere is the combination of ammonio methacrylate polymer, cationic or zwitterionic surfactant and organic acid, or the advantages afforded thereby suggested by Dandiker. Contrary to the applicant's argument, applicants' claims do not exclude the use of pH independent polymer.

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Furthermore, the advantages disclose in applicant's specification at page 6 is not recited in the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant's attention is called to Dandiker at column 6, lines 42-54, where enteric coating is suggested. Dandiker also teaches the time release of the delayer layer that is within the claimed limit (columns 5&80). Accordingly, such language suggests the use of enteric coating polymer (ammonio methacrylate polymer) desired by the applicant.

Applicant argues that Midha teaches dosage form for the pulsatile delivery of methylphenidate and hundreds of other drugs that might be combined with methylphenidate, or of dozens of delayed release coatings, or of hundreds of optional excipients, does not amount to a teaching or suggestion of the particular combination of elements and ingredients in applicants' claimed composition. However, applicants' claims permit a selection of numbers of active agents as well (claims 22 and 58). The short list of additional active agents taught by Midha (CNS stimulants, anti-depressant agents, and anti-anxiety agents) is reasonable for one of ordinary skill in the art to, by routine experimentation select one drug from the 3 disclosed species. One of ordinary skill in the art would have been motivated to prepare a layer-tablet composition comprising any anti-anxiety agents taught by Midha, because Midha teaches a pharmaceutical dosage form for pulsatile delivery of active agent, including temazepam and triazolam.

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Applicant argues that Midha does not disclose an immediate release entity releases 40-70% of the active agent in 30 minutes, and a second dosage being release within 3-5 hours. In response to applicant's argument that the reference does not show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., disclose an immediate release entity releases 40-70% of the active agent in 30 minutes, and a second dosage being release within 3-5 hours) are not recited in the rejected claims. Applicant's attention is called to column 5, lines 10-20, where Midha teaches a first group of particles or beads releases drug substantially immediately following ingestion of the dosage form, a second group releases drug approximately 3-5 hours following ingestion. Accordingly, Midha teaches the dosage form having first immediate release entity and second delayed release entity as required by applicant's generic claim 1.

Applicant argues that Cuca relates to a taste-masked composition comprising an active ingredient. The composition is intended to mask the noxious, bitter taste of certain drugs. Thus, the subject matter of Cuca bears no relationship in form or function to either applicant's claims and/or Midha. In response to applicant's argument that Cuca reference is irrelevant or adds nothing to Midha, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instance case,

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Cuca teaches active ingredients suitable for *pulsatile release* that can be incorporated in a drinkable form (column 7, lines 36-42). Furthermore, the active ingredient is hypnotic agent (column 3, lines 19-50).

Applicant argues that the mere fact that Bastin discloses a tablet formulation containing zolpidem would not, either alone or in combination with Midha, suggest applicant's timed dual release composition. In response to applicant's argument, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Bastin is relied upon solely for the teaching of hypnotic drugs including zolpidem.

Applicant argues that the rejection over Midha and Gallopo is without merit since Gallopo discloses dentifrice compositions which maybe contain cocamidopropylbetaine. In response to applicant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Gallopo is relied upon solely for the teaching that cocamidopropylbetaine is a cationic surfactant.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Tran whose telephone number is (703) 306-5816. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page, can be reached on (703) 308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3592.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

  
THURMAN K. PAGE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600